

Illinois Environmental Protection Agency
Bureau of Air, Permit Section
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Project Summary for an Application from
H.I.G. Chemicals, Inc. for Renewal of the
Federally Enforceable State Operating Permit (FESOP) for
A Fatty Acid Plant
Chicago, Illinois

Site Identification No.: 031600CGF
Application No.: 72100410

Schedule

Public Comment Period Begins: September 12, 2008
Public Comment Period Closes: October 12, 2008

Illinois EPA Contacts

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I. INTRODUCTION

H.I.G. Chemicals, inc. has applied for renewal of its Federally Enforceable State Operating Permit (FESOP) for their Fatty acid plant. This plant requires an air pollution control operating permit because it is a source of emissions. The Illinois EPA has prepared a draft of the renewed permit that it would propose to issue for the plant. However, before renewing the permit, the Illinois EPA is holding a public comment period to receive comments on this proposed action and the terms and conditions of the draft permit that it would propose to issue.

II. SOURCE DESCRIPTION

H.I.G. Chemicals, inc. is a fatty acid plant located in Chicago. The plant operates the following equipment; boilers, fatty acid plant, wastewater treatment system and storage tanks.

All boilers are only allowed to fire natural gas. The boilers are used to provide steam for process and the space heat for the plant.

III. GENERAL DISCUSSION

Federally Enforceable State Operating Permits (FESOPs) are federally enforceable, that is, the terms and conditions of the permits can be enforced by USEPA under federal law, as well as by Illinois government and the public under state law. These permits can establish federally enforceable limitations on the operation and emissions of a source that restrict the potential emissions of the source.

The source has been operating this plant under a FESOP because the actual emissions of the plant are below the levels at which the plant would be considered a major source under Title V of the federal Clean Air Act. However, in the absence of federally enforceable limitations, the plant's potential emissions would be such that the plant would be considered a major source. The permit acts to restrict the plant potential emissions so that it need not be considered a major source. As a result, the source does not need not obtain a Clean Air Act Permit Program (CAAPP) permit for the plant, as would otherwise be required.

The FESOP limits the operation and annual emissions of the plant to below the major-source-thresholds of 100 tons for NO_x.

IV. APPLICABLE EMISSION STANDARDS

All emission units in Illinois must comply with state emission standards adopted by the Illinois Pollution Control Board. These emission standards represent the basic requirements for sources in Illinois. The board has standards for sources of nitrogen oxides (NO_x). The application shows that the plant is in compliance with applicable state and federal emission standards.

The principle air contaminant emitted from the fuel combustion is nitrogen oxides (NO_x). NO_x is formed thermally by the combination of oxygen and nitrogen in the air at the temperatures at which the fuel is burned.

Other contaminants emitted are particulate matter, carbon monoxide, sulfur dioxide, and volatile organic material.

V. CONTENTS OF THE PERMIT

The renewed permit that the Illinois EPA is proposing to issue would continue to identify the specific emission standards that apply to the emission units at the plant.

The permit would also contain limitations and requirements to assure that this plant is operated as a non-major source. The permit would limit the operation and annual emissions of the plant to below the major-source-thresholds of 100 tons for NO_x. (Annual emissions of other pollutants from the plant are well below the 100 ton major source threshold.)

The permit would also set limitations on requirements to assure that this facility will be operated as a non-major source. The permit sets limitations on Fatty Acid Plant emissions. These limitations are consistent with the historical operation and capacity of the facility.

The permit conditions would also continue to require appropriate compliance procedures, including inspection practices as well as recordkeeping and reporting requirements. The source must carry out these procedures on an on-going basis to demonstrate that the plant is being operated within the limitations set by the permit and the plant's emissions are being properly controlled.

VI. REQUEST FOR COMMENTS

It is the Illinois EPA's preliminary determination that the source has met the requirements for renewal of its permit. The Illinois EPA is therefore proposing to renew the permit.

Comments are requested on this proposed action by the Illinois EPA and the proposed conditions on the draft permit. If substantial public interest is shown in this matter, the Illinois EPA will consider holding a public hearing in accordance with 35 IAC Part 166.